

THIS IS NOT A PERMIT

State of Indiana
DEPARTMENT OF NATURAL RESOURCES
Division of Fish and Wildlife
Early Coordination/Environmental Assessment

DNR #: ER-18942**Request Received:** March 18, 2016

Requestor: US Army Corps of Engineers, Louisville
 District
 George DeLancey
 6855 State Road 66
 Newburgh, IN 47629-2678

Project: Subsurface coal mining & bridge & conveyor crossing over Pigeon Creek resulting in wetland and stream relocations; PN# LRL-2013-00635-gjd

County/Site info: Warrick

The Indiana Department of Natural Resources has reviewed the above referenced public notice in accordance with the 1956 Fish and Wildlife Coordination Act. Our agency offers the following comments for your information.

If our agency has regulatory jurisdiction over the project, the recommendations contained in this letter may become requirements of any permit issued. If we do not have permitting authority, all recommendations are voluntary.

Natural Heritage Database: The Natural Heritage Program's data have been checked. The animal species below have been documented within 1/2 mile of the project area, as indicated.

A) Elberfeld Quadrangle Map (northern portion of project area):

1. Indiana Bat (*Myotis sodalis*); federally & state endangered
2. Cerulean Warbler (*Dendroica cerulea*); state endangered (SE1/4 Section 28, T4S, R9W)

B) Daylight Quadrangle Map (southern portion of project area):

1. Copperbelly water snake (*Nerodia erythrogaster neglecta*); state endangered (E1/2, E1/2, Section 3, T5S, R9W, Wabash & Erie Canal)
2. Northern Harrier (*Circus cyaneus*); state endangered (Ayrshire Mine, W1/2, SE1/4, NW1/4, Section 3, T 5S, R9W)
3. Red-shouldered Hawk (*Buteo lineatus*); state special concern (SW1/4, SE1/4 Section 26, T5S, R9W, Pigeon Creek Bottoms)

Fish & Wildlife Comments: Avoid and minimize impacts to fish, wildlife, and botanical resources to the greatest extent possible, and compensate for impacts. The following are recommendations that address potential impacts identified in the proposed project area:

1) Listed Species:

The notice mentions that the project is within the range of three federally listed species: Indiana Bat (*Myotis sodalis*), Northern Long-eared Bat (*Myotis septentrionalis*), and Sheepnose (*Plethobasus cyphus*). However, there is no other detail offered other than there would be coordination with the appropriate state and federal agencies. The DNR does not anticipate any Sheepnose in Pigeon Creek. However, impacts to the state and federally endangered Indiana Bat and federally threatened Northern Long-eared Bat appear to be significant, including the potential impact to a known Indiana Bat maternity colony. If this project moves forward, it must include a plan to mitigate adverse impacts to these bat species using the US Fish and Wildlife Service's Protection and Enhancement Plan guidelines to maintain sufficient habitat around known maternity colonies. Any work on-site and mitigation related to the bats needs to be coordinated with the US Fish and Wildlife Service. Proper planning to mitigate adverse impacts to these and other listed species recorded in the area is needed.

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2) Habitat Mitigation:

The proposed mitigation ratios appear low, especially given the level of impact. The DNR Environmental Unit typically seeks 4:1 mitigation for forested wetlands, 3:1 for scrub/shrub wetlands, and 2:1 for emergent wetlands. Other ratios are sometimes used by other regulatory agencies, and the DNR has used altered ratios in site-specific instances; however, it is not clear why the listed ratios are proposed. In fact, given the level of impact and the temporal loss of such a significantly sized wetland, a ratio higher than normal seems more appropriate. In addition to the low mitigation ratios, the enhancement planting level (average 100 trees/acre) and the enhancement success criteria (10 plantings/acre surviving) is exceptionally low. It is unclear how a success of 10 trees per acre, or 90% loss, is considered success.

A major portion of the proposed mitigation is significantly off-site, in a completely different HUC8 watershed from the impact site. The proposed mitigation area is associated with the Wabash River in a regularly flooded area whereas the impact is on a smaller stream with an extensive intact habitat. Given the extensive nature of the existing wetland complex, moving mitigation so far off site does not appear to be appropriate. Due to past failed wetland restoration efforts nearby, it is not clear that the impacts can be properly mitigated and the risk of failure appears higher than normal.

While some wetlands are shown to be avoided, there is no discussion of how the large scale topography changes would affect these avoided wetlands. If the hydrology changes, these avoided wetlands could easily drain and lose their wetland form and function. This would result in additional impacts that are not being mitigated. All potential secondary impacts need to be investigated. The possibility for greater impacts beyond direct impacts causes more concern about the project.

There may be an existing conservation easement on the east side of Pigeon Creek. Further investigation of existing easements is needed.

3) Stream Protection:

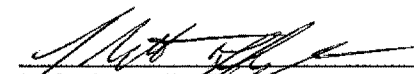
If this project happens to proceed, a minimum buffer of 100 feet along Pigeon Creek and other streams identified as intermittent and perennial needs to be maintained to protect these waterways. Stream reconstruction plans must include pools, riffles, and meanders to maintain sinuosity, and riparian vegetation (both herbaceous and woody species). Any plants used in restoration, mitigation, or reclamation must be native to the county; no non-native invasive species should be allowed.

4) Summary Comments:

Based on the extreme level of impacts, low proposed mitigation, and no practical information regarding listed species, the proposed project would result in significant environmental harm and unreasonably detrimental impacts upon natural resources. It is not clear how this project could move forward given these issues. The Environmental Unit recommends that the permit application be denied.

Contact Staff:

Christie L. Stanifer, Environ. Coordinator, Fish & Wildlife
 Our agency appreciates this opportunity to be of service. Please contact the above staff member at (317) 232-4080 if we can be of further assistance.


 J. Matthew Buttrington
 Environmental Supervisor
 Division of Fish and Wildlife

Date: April 13, 2016